TRANSIT IN THE VALLEY: WHERE DO WE GO FROM HERE?

The decision on where to go with transit requires the Valley to also decide what kind of region it wants to become.

Today, the modern American form of urban land use -- strip development, super-highways, sprawl, and low-density residential subdivisions -- defines the Phoenix landscape. The byproducts of this development pattern, however, are becoming increasing obvious in the Valley: air pollution, traffic congestion, a loss of sense of community, gross disparities among neighborhoods, loss of open space and desert environment, and increasing tax burdens to pay for roads and the extension of public services. This sprawling urban landscape also creates a formidable barrier to attracting transit riders because people come from widely-dispersed homes and go to widely-scattered jobs and retail shopping.

To say that sprawl has caused only negative impacts on the Valley, however, is not entirely correct. There is no question that this pattern of growth has helped fuel the Phoenix area's much-envied economic and population boom. In addition to being the vibrant urban center of the state, the Valley is a wealthy metropolitan area with clean, globally competitive industries, and is the chosen home for more than 50,000 new residents each year. Nevertheless, despite its rising status as a region, metropolitan Phoenix still has a woefully under-funded and inadequate transit system.

The topic of transit presents an opportunity to deliberate about and consciously decide the forms of urban development the Valley wishes to maintain, develop, create, or restore.

HOW DID WE GET HERE?

In the Valley, developing viable long-term transit from where we are currently will be very difficult if key components continue to remain unaligned. Thus, before getting to the primary purpose of this report, it is important to first establish the players and basic considerations relevant to the effectiveness of a transit system.

Few would dispute that the Phoenix metropolitan area is severely lacking in terms of mass-transit compared to other similarly sized and configured cities. The Valley's fleet of roughly 400 buses is about one-third of the service found in San Diego, Atlanta, and Seattle. In addition, most of Phoenix' peer regions either already have, or are planning rail systems. Of the 30 largest metropolitan areas in the U.S., only six -- Phoenix included -- do not currently have or are not planning to add rail to their transit system.[1]

Why is the Valley so far behind?

An easy target for blame is the voters. Twice in the last seven years, Maricopa County voters have decided not to invest in transit: the ambitious and expensive ValTrans proposal in 1989, and the half-cent freeway and transit package in Proposition 400 in 1994.

But voters are only part of the story; this region's inadequate transit situation is also the fault of many others.

- **Land use planners have rigidly segregated housing, commerce, and industry, which has led to an auto-centric, low-density region.**

In order for alternatives to automobile travel to be successful, land use patterns must make transit, biking, and walking not only feasible, but convenient, attractive, and cost-effective.

Portland, Oregon offers an excellent example of coordinated transportation and land use planning. Planners there maintain that "the degree to which a community is walkable, bikeable, and serviceable by transit depends on three 'D's': density, designation, and design:

Density. It is almost a basic tenet of planning that as residential densities decrease below seven net units per acre, the amount of transit use also decreases, while the amount of automotive travel rises sharply.

Designation. The designation of land determines the degree to which we mix or isolate various uses. The notion of land zoning got its start at the turn of the century when cities began promoting separation of residential and industrial uses. The concern then was primarily health-oriented; smoke-stack industries were hazardous neighbors. Regrettably, this trend in land use isolation expanded to the point where most development now occurring in our urbanized areas is completely homogenous -- all residential, all commercial, or all employment -- with each enclave separated from the others.

This development pattern tends to substantially lengthen the distance between trip origins and destinations, making pedestrian and bicycle travel nearly impossible. The result is that in today's suburbia, as many as 12 car trips are generated per household per day. Some research has suggested that if strict land use homogeneity were eliminated and land uses were allowed to mix, the number of trips per suburban household could be reduced by as much as 25 percent.

Design. Even if we succeed in increasing development densities and mixing land use designations, suburban development that is not designed to promote pedestrian, bicycle, and transit travel will still promote auto dependence. Busy streets with no crosswalks and huge parking lots are all impediments to alternative transportation."[2]

- **Transportation officials and traffic engineers have thought mostly about the needs of cars as they've plotted the path of transportation.**

Because drivers want to go fast and want lots of pavement, most transportation planners have focused their attentions on designing street systems with few intersections and many lanes, wide streets with soft sweeping turns, and ever-more freeways and ever-larger parking lots.

Because these planners are typically not trained to be concerned about reducing automobile dependency, they do not design communities in the interests of pedestrians, bicyclists, and transit riders. Indeed, this

mentality makes narrow streets, bike paths, parks, plazas, and sidewalks useless obstructions to the car, rather than desirable features of communities.

Agency budgets provide evidence of the primacy of the automobile. Consider Arizona's financial support for public transportation compared to several western states and all states in the following table:

State Financial Assistance for Public Transportation*
(excluding federal and local funding)

	State Funding (millions $)	Per Capita Funding
California	$1,336.9	$43
Oregon	27.0	9
Utah	38.8	21
Washington	146.7	29
All States	$5,668.6	$22
Arizona	**$11.1**	**$3**

*Funding data is for FY 1992-93

Source: American Association of State Highway and Transportation Officials (*1993 Survey*) and *Statistical Abstract of the United States*, 1993.

One attempt to turn this tide came in 1991 when Congress passed the Intermodal Surface Transportation Efficiency Act (known as ISTEA) with the intention of encouraging states and localities to start planning their transportation futures with an eye toward more public transit and less asphalt, and with more emphasis on clean air and livable communities.

Although certainly well-intentioned, the problem with ISTEA has been that such a vision of the future is not shared by all state and local officials.[3] In fact, in Arizona, it has been transportation business as usual: deal with bad traffic and bad air by building more roads and freeways.

Governor Symington's freeway plan in response to the defeat of Proposition 400 is an example. The Governor's plan reprograms limited freeway funds but fails to address continual shortfalls in transit funds. Ironically, this is the case even though Proposition 400 was a transit *and* freeway package. The Governor's plan does include toll roads, which, as discussed later, is a step toward making the price of road transportation more accurately reflect its actual costs -- from urban smog to pavement damage.

- **Our attachment to the automobile and the quarter-acre suburban dream house undermines the viability of transit.**

Despite the best efforts of environmentalists, transit advocates, desert preservationists and bike proponents, Valley residents still love to drive their cars. The evidence is all around us, but perhaps it is most starkly illustrated in the number of vehicle miles travelled (VMT) in the Valley: almost 50 million a day in 1990, nearly a 100 percent increase since 1980, despite a population increase of only about 40 percent during the same period.[4]

Valley residents don't like taking buses; for one thing, it's difficult to learn to trust in someone else to get you to work on time. Walking or cycling to work is also viewed as highly impractical, particularly by the large number of residents who live near the edge of the city, away from major job centers. They are perfectly happy to drive -- alone. In 1990, 75 percent of Maricopa County residents drove to work by themselves.[5]

- **Developers favor the fringe of the region where land is cheap and plentiful.**

Because the size and scale of development in the Valley are growing ever larger, developers are looking farther out to assemble the acreage they want and can afford more easily. Architect Peter Calthorpe has seen this trend: "Towns no longer grow by individual buildings or even small groups, but by production units of approximately 150 houses or by retail centers of at least 60,000 square feet." He goes on to say, "apartments are rarely developed at under 100 units because of management economics. Land developers often bring over 100 acres (the size of a classic town center) through the permitting process with one master plan."[6]

These huge developments demand major arterials, and practically assure isolated subdivisions, shopping centers, and office parks that require automobile use to connect them. The result is that people use cars on short trips of less than five miles to get to a store, school, or work. Such trips account for about 19 percent of total U.S. automobile mileage and contribute a disproportionate amount of emissions and fuel usage, because of the inefficiencies of cold engines and stop-and-go drives.[7]

- **Job creation has been scattered throughout the newer suburbs instead of the central city.**

The first great wave of suburbanization was a migration of the middle class from the central cities in search of affordable homes. But over the past dozen years or so, that movement has been immensely reinforced by a flight of jobs following the people. Offices are being widely dispersed near the plush communities where a firm's top executives often live, and companies can tap into a well-educated work force of middle managers and skilled technicians who live in these areas.

The decentralization of jobs across huge areas is being powered by some of the mightiest currents in modern life: the communication revolution and the change from manufacturing to a service economy. Says Joel Garreau in a popular book, *Edge City: Life on the New Frontier*, suburban office / retail / residential complexes like Tyson's Corner, Virginia are the wave of the future. Garreau argues that cities and central business districts increasingly are becoming passé in a service-oriented economy. People and commerce are becoming linked by computers and fax machines.

The grinding commute into the central city is becoming a thing of the past. Because most jobs are located in the suburbs, the predominant commute is from one low-density suburb to another, not to downtown. Moreover, the combination of low-density settlements and low-density work places reduces the feasibility of commuting by mass transit. Such commuting is efficient mainly when passenger points of origin or destination are massed in a few large centers, so that routes and vehicles can converge at one end of the journey or the other.[8]

- **Federal, state, and local elected officials have been unwilling to question existing policies that are counter to transit development.**

Federal policies that fuel society's preference for cars and homes in the suburbs are well known: interstate highways, housing subsidies, tax policies.[9]

But state and local governments -- as well as businesses -- are also guilty of subsidizing automobile use and facilitating development patterns that lead to high

automobile dependency. For example, many government agencies, such as water suppliers, subsidize development on the metropolitan fringe by spreading the cost of their infrastructure across all users, new and old. Utilities -- such as telephone and gas -- have the same pricing policies. As a result, the costs of providing services to suburban and exurban residents are understated and low-density development on the fringe is less likely to pay its own way.

Most experts agree that until we take this under-pricing issue head-on we will not change anything. Failing to levy the full marginal cost gives sprawl development an unfair competitive advantage over projects in existing urban cores. The property tax system is another promoter of low-density development. Experts recommend putting more emphasis on taxing land and less on taxing improvements so as to encourage higher-density development supportive of transit.

Failure to charge actual costs for automobile usage is another barrier to transit development. As economist Mark Derr points out, "underpricing induces shoppers to travel across town for a small financial saving, home buyers to choose larger commutes, and travelers to drive rather than use other modes. This increases congestion, accidents, energy consumption, pollution, municipal costs and urban sprawl."[10] These are costs car owners do not pay directly. Imposing such costs on car owners would discourage automobile use and prompt citizens to try other alternatives.

- **The cities' ambivalence toward regional planning and coordination has encouraged each community to competitively pursue its own self-interests.**

Generally speaking, the Valley's cities compete for residents and businesses through tax policies and public services. Some argue that this is the way it should be -- cities that are inviting places to live and work will flourish; those that are not will decline. Others argue that this competition leads cities to "cherry-pick" land uses based on tax considerations; that is, find room for and give subsidies to big sales-tax producers to locate in their communities, regardless of growth issues and other impacts on neighboring jurisdictions. At the same time, cities seek to exclude unwanted land uses (e.g., low-income housing and homeless shelters), leaving such problems and attendant services -- public transit, for example -- for their neighbors to deal with.

Thus, even if a city wants to halt "development wars" and manage its growth in a more responsible fashion, there are very few incentives to do so. It may very well experience the negative impacts of unmanaged growth by neighboring jurisdictions, and receive few of the advantages. For example, a city with policies that steer development away from its edges, requires developers to pay impact fees that cover service costs in their entirety, and raises parking lot fees to discourage car use runs the risk of pushing new development into adjoining cities that do not impose such policies. As growth problems such as pollution and traffic congestion spill over municipal boundaries, the first city must attempt to grapple with them without having the benefit of any tax revenue from the development itself. The net effect is this: the "responsible" city is a double loser.

Under these circumstances, it is hard for a city to have the political will to order development patterns in its community and to adequately "charge" for auto use. The only rational answer is for Valley cities to start negotiating with neighboring

jurisdictions on issues such as taxes, land use, and environmental protection.

- **Transit proponents "shot the moon" with the grandiose ValTrans initiative in 1989 and have lacked vision ever since.**

The ambitious and complex ValTrans plan would have increased the Maricopa County sales tax by a half cent to provide the Phoenix metropolitan area with 103 miles of automated, elevated rail connecting the central city to the eastern suburbs and 1200 buses. The $8.5 billion mass transit plan was defeated by a three-to-two margin.

Having lost in 1989, pro-transit forces acceded in 1994 to what had previously been the unthinkable: hitching a ride with a freeway vote in Proposition 400. Some critics have charged that transit proponents climbed aboard a bandwagon they should have steered alone but chose not to. By failing to sharpen their agenda and build a constituency between 1989 and 1994, transit proponents let the vision fade.

But the questions remain: Was the bundling of freeway and transit a mistake? Should transit advocates have insisted on a strategy in which transit would "go it alone"?

WHAT SHOULD WE DO?

Changing old habits won't be easy for any of the players faulted above. The lesson, however, is that if transit is to be successful, all options and policies will have to be developed interactively to deal with the variety of actors and their roles, objectives, powers, and perceptions. Further, the importance of a multifaceted approach for promoting transit, as well as the challenges of pursuing it, need to be part of the informational backdrop for a new public dialogue about the future of transit and growth in the Phoenix metropolitan area.

For a number of years, Phoenicians acted as though this region was immune to the concentrations of poverty, violence, and dirty air that typically accompany urban sprawl and that are evident in some parts of the eastern U.S. and Southern California. But now Valley residents alternatively dread and deny the imminent truth that this area is not immune. Years of virtually unlimited, low-density development are beginning to create enormous social, economic, and environmental problems similar to those faced by California's large cities.

Is there an alternative? There is, and many in California are now calling for it: be smarter about growth.

In a report published in early 1995, a diverse coalition -- including the Bank of America, the California Resources Agency, the Greenbelt Alliance, and the Low-Income Housing Fund -- suggested that the somewhat-tarnished Golden State find a new development model: "We must create more compact and efficient development patterns that accommodate growth, yet help maintain California's environmental balance and its economic competitiveness ... and we must encourage everyone in California to propose and create solutions to sprawl," it said.[11]

Arizonans are only beginning to understand the need for alternative visions for metropolitan growth. Some call for developing new land use patterns that reduce air pollution and auto-dependency. Others say they want to direct growth in order to revitalize the central city or accommodate new industrial and residential mixes. Still others favor a response to sprawl that limits community size and preserves open space and lifestyle choices. All of these views suggest that progress toward a new vision hinges on a collective

deepening of our sense of responsibility to the community, and to future generations.

Others, though, dispute the need for a new vision of urban development. Arguing that growth patterns should be left to individual, market, and "spontaneous" choices, they say that governments and communities should make little effort to influence market forces.

Unfortunately, however, this type of "unconstrained individualism" creates inconsistencies and disparities between individual desires and societal well-being. Economist Anthony Downs points out that the American dream of owning a car is a perfect example of such an inconsistency. When someone purchases a car, they achieve the individual benefits of freedom and mobility, but they also contribute to the societal problems of smog and traffic congestion.[12]

As the mid-1990s propel us toward the next century, we need to consider these issues -- What goals should we embrace for Phoenix in the 21st century? What growth pattern is most desirable? How can we create a vision of a metropolitan area which is less prone to today's problems or others equally undesirable?

The best strategy to answer these questions is clear: begin to take ambitious steps, not safe ones. Enhancing the current transit system is a place to start, but it will take more than new transit capacity to reform a lopsided land use pattern and transportation system. The reality is that transit will continue to be talked about and planned in slow motion unless actions are taken to:

- **!** deal with the forces promoting the car culture;
- **!** achieve transit-supporting land use; and,
- **!** rethink who benefits from a quality transit system.

There is a combination of actions that can comprise a viable solution to the Valley's transit problems. Arriving at such a combination -- one that will ultimately pass the test of voter approval -- is the responsibility of all the players mentioned in the previous section. In other words, they need to get their collective act together.

As a point of departure for developing the right combination, both research and common sense indicate that some degree of each of the following elements should be included:

- Stop trying to play catch-up through freeway building.
- Charge actual costs for automobile usage.
- Enhance transit by improving services and amenities.
- Change auto-centric behavior.
- Alter development patterns.

• Stop trying to play catch-up through freeway building.

The most obvious strategy to encourage transit use is to discourage auto use. The most obvious prescription for discouraging auto use is to build fewer roads and parking lots and increase the cost of driving. For some reason, however, this simple reality does not register strongly in Arizona.

Businesses and policy makers can not seem to shake their attachment to yesterday's vision of tomorrow -- the dream

of awesomely efficient highways that stretch toward the horizon and that match the rapid growth rates in population and car ownership. The fact that this vision completely disregards the way highway capacity really works has not stopped decades of planners and politicians from adopting it as the paradigm of "The Way Things Ought to Be."

"The Way Things Actually Are" turns out to be something else altogether. Remarkably, additional roads can make things worse, both in terms of traffic congestion and quality of life. Anthony Downs, author of *Stuck in Traffic* (1992) refers to the problem as "dual swamping by growth" and explains, "it is part of a vicious cycle: authorities improve highways to fight congestion but then those improvements create incentives to (1) increase automobile vehicle ownership and use and (2) change the location and form of both residential and nonresidential growth. Over the long run, these actions merely serve to intensify congestion."[13]

For now, the Governor's regional freeway plan has a lot of support. Many residents of suburban Maricopa County are asking for it; a number of landowners are planning to finance their retirements on right-of-way sales; and the forces of resistance to highway expansion have been anemic, if not totally absent. Moreover, even though voters refused to increase sales taxes to fund it, the Governor rearranged funds and decreased the size of the freeway program in order to make it happen.

With all the talk about freeways, public transit hasn't even merited a blip on the state's radar. Unfortunately, the reality is that if public transit does not get launched quickly, a new freeway plan virtually guarantees sprawl far into the future. One way to get a transit system up and running is to use state and federal highway monies, and the 1991 federal ISTEA legislation makes diversion to mass transit easier than ever, especially for capital purposes. But it must happen soon; ISTEA reauthorization in 1996 will almost certainly change these opportunities.

Shifting money to increase transit funding now may reduce the region's total transportation bill in the future. It could mean less money for road construction and maintenance, but it could also mean benefits in terms of quality of life. No doubt, there will be some who will challenge this logic. And in that case, the best response is honesty: while we cannot be sure about what might happen in Arizona, the history of Oregon might provide some insight.

The State of Oregon has calculated that over the next 20 years, more than $11 billion in road investments can be avoided by shifting land use patterns and expanding transit. For the Portland region, the state says, that is a savings of nearly $10,000 per household.[14]

In a similar vein, officials in Portland maintain that if it had not decided to establish the Tri-Met transit system and support transit 20 years ago by de-emphasizing parking downtown and reducing the capacity of arterials and freeways leading to downtown, it would have had to add six 42-story parking structures to its skyline and two additional lanes to every major highway entering the city.[15]

The same sorts of evidence are available in other areas, too. An Urban Land Institute study found that the costs of providing streets, utilities and schools for low-density sprawl were more than 50 percent greater than for compact development.[16] Since highways are a direct promoter of sprawl, more thoughtful investments in non-highway modes that support compact development could produce savings both from roads not built and through greater efficiencies in service provision.

Considering this information, shouldn't we be rethinking our "build-the-freeways-first" approach to transportation?

- **Charge actual costs for automobile usage.**

Want to really change things? Let pricing strategies have a chance. As newspaper columnist Joe Bob Briggs puts it: "Lemme 'splain somethin' ... You want mass transit? Take away the parking and take away the cheap gas."[17]

Experts agree. Studies show that vehicle travel is responsive to price and that individuals drive less if given appropriate incentives and substitutes. Proponents of pricing strategies argue that market-based tactics, such as higher gasoline prices, the elimination of free parking and pay-at-the-pump insurance, have the greatest potential for discouraging people from making automobile trips: "if these cost increases were big enough, they could make it too expensive for many commuters to continue driving alone," says Anthony Downs.[18]

Similar to Joe Bob Briggs, Downs uses the example of free employee parking lots to prove his point: "If free parking were prohibited, many workers would stop using cars for commuting altogether, and even more would stop driving alone. Five studies have shown that an average of 66 percent of workers drove to work alone when employers provided free parking, but only 39 percent did so after employers ended that benefit. Shifts of solo drivers to ride sharing were much smaller when employers paid commuting allowances to all workers but still provided free parking." The author also notes that such parking charges would have to be implemented throughout a metropolitan area to affect commuting patterns.[19]

The seeds for other types of potentially effective pricing strategies were sown decades ago when Arizona -- like most states -- enacted fuel taxes, vehicle registration fees, motor carrier taxes and motor vehicle operator license fees. But these seeds need some tending today. Indeed, several are reaching the end of their productive life and are in serious need of replacement or major rejuvenation to meet the needs of current times and the future. A key problem is that the value of user fees are being so eroded by inflation and tax limits that they are rapidly losing their potency as disincentives to private vehicle use. For the same reasons, they are also not generating as much revenue as they could for transportation investments.

For example, the gas tax in Arizona is not indexed for inflation. What this means, of course, is that the current 18 cents per gallon gas tax will be worth 10 cents per gallon in 2006 (assuming an average rate of inflation of 4 percent per year). At that date, the tax will represent 9.6 percent of the gas price verses 14.8 percent in 1995. The net effect, according to transportation analyst Cyril Hodgins, is that "inflation-adjusted highway-user revenues per private vehicle at the end of this decade are expected to be almost 25 percent below their current level." On the other hand, indexation of tax rates and fees could have generated $24 million in new revenues in 1994.[20]

As a rapidly growing state that does not have adequate highways and transit systems already in place, Arizona especially can not afford to have the value of its taxes eroded by inflation. And since a two-thirds legislative vote is now required to raise taxes in Arizona, protecting current tax values from inflation erosion may be the most politically feasible way to increase revenues for transportation improvements in the future.

In addition to the non-indexed fuel taxes, the state has also exempted vehicle fuels from retail sales tax. In 1994, Arizona failed to capture $128 million in highway revenue because of this exemption.[21] It's true: although sales tax is paid on virtually everything that can be purchased at a convenience store or a gas station, sales tax is not paid on the fuel we purchase.

More important than the revenue loss is that a motor fuel exemption, combined with the non-inflationary adjusted taxes and fees means that our policies are actually making it less and less expensive to drive in Arizona. Pricing strategies to discourage auto travel are virtually non-existent.

If Arizona ever hopes to correct underpricing of driving and to use "market-based tactics" to get citizens out of their cars, correcting this sales tax exemption is an obvious step toward that goal. Although It may prove to be a feeble incentive, because the sales-tax signal is diluted by the other costs of owning and running a car, it does carry out both the "user pays" principle and begins to create honest pricing for auto travel.

Ways to Make Drivers Pay the Full Cost of Private Auto Use

- Base auto emission charges on vehicle miles traveled and relative emissions
- Price road access to reflect the type of vehicle used, time of day, and volume
- Charge for employee parking
- Impose user charges, such as tolls and fuel and weight-mile taxes

The box above contains some of the pricing options. Conventional wisdom holds, however, that pricing strategies face significant opposition from citizens. Indeed, a petition drive is currently underway in Arizona to place on the 1996 ballot a proposition to lower vehicle registration fees. If it does make it to the ballot, the proposed initiative presents an opportunity to openly discuss user fees and to test conventional wisdom. More importantly, it may be an opportunity to affirm agreement on the principle that those who use highways should pay for them.

It may be time to agree on a second, bolder principle as well: those who add to urban problems of congestion and poorer air quality through the use of their vehicle must contribute to solving those problems by supporting programs to provide viable alternatives to the use of private vehicles. The Vehicle License Tax (VLT) is key to making this principle a reality because it is the only existing vehicle-related tax that can be spent on transit.

The Arizona Constitution requires that all monies derived from fees, excises, or license taxes relating to registration, operation, or use of vehicles be expended for highway and street purposes. Yet the Constitution specifically excludes the VLT from this expenditure requirement on the grounds that it is more of a "property tax" than a user fee. As a result, policy makers decided in 1973 that only 31.5 percent of VLT revenues should go to fund highways and streets. The other 68.5 percent goes to five non-transportation funds: 20 percent to the state general fund; 25 percent to the county general funds; 25 percent to city general funds; 25 percent to the state general fund for education; and 5 percent to cover administrative costs. Not having transit in the allocation formula is a missed opportunity to implement the aforementioned principle.

It is also common practice in other states to use these revenues for transit. The State of Washington, for example, uses VLT revenues as challenge grants to encourage

cities and counties to spend money on transit and other alternatives to traveling by car.

- **Enhance transit by improving services and amenities.**

The Valley has no where to go but up on the transit enhancement front. And it appears that this view is widespread among residents of the Phoenix area. Currently, the Valley's public transit system consists of 426 buses, averaging 130,000 trips per day, plus two auxiliary components: dial-a-ride service and the Regional Ridesharing Program which supports carpooling, bicycling, vanpooling, and walking promotions. Pretty basic stuff; no New York-type subways, no San Francisco-style trolleys or light rail, not even well developed private jitney or van services like Miami and other cities. What's more, it is clear that the Valley's best -- and really only -- transit feature, its bus service, does not compare well to other western cities.

Bus Service in Selected Western Metropolitan Areas

Metro Area	Annual miles of bus service per capita
Seattle	25.8
San Antonio	21.1
Portland	19.1
Denver	16.9
San Diego	15.1
Dallas/Fort Worth	10.2
Average	18.0
Metro Phoenix today	**7.4**

Source: Hodgins, 1995

In a March 1995 survey, Phoenix voters were asked to suggest the most important improvements which could be made to the bus system. They favored increasing Dial-a-Ride service for seniors and disabled people (66 percent); increasing the number of buses (53 percent); raising levels of security (51 percent); expanding bus service from 6AM-8PM on Sundays (43 percent); providing bus service until midnight on weekdays and Saturdays (41 percent); improving express service (40 percent) and increasing park-and-ride locations (39 percent); adding passenger shelters (35 percent); and increasing transportation to sports and cultural events (25 percent).[22]

Such requests for bus improvements are reasonable enough. Mostly, residents want expanded bus service, in hours and in routes. As a rule, they want inexpensive, convenient, predictable and frequent (every 10 to 15 minutes) service. They also want safe, cool, and clean buses and bus facilities.

Ironically, Valley residents can expect their less-than-adequate transit service to get worse. One blow will come from cuts in federal spending. To balance the federal budget, Republicans who signed the "Contract with America" in 1994 pledged, among other things, to cut transit operating assistance by 60 percent and capital funding by 36 percent. Recent Congressional budget decisions indicate that the impact for the Valley will be roughly $2 million. This reduction comes on the heels of a half-million dollar cut in federal funds in 1994.

Phoenix Metro Regional Transit Funding Sources ($ millions)

- Phoenix general fund:	$20
- other cities' contributions:	$2
- state lottery funds:	$12
- fare box revenues: (30% of operating fund)	$17
- Federal Transit Admin.:	$5
- Regional Area Road Fund: (1985 sales tax increase)	$6.5
- other federal funds:	$3.5
Total:	$65 million annually

(approximate)

Source: RPTA

A second blow to transit service could come as the result of a recent state mandate for air quality. As a part of efforts to meet federal clean air standards, the Arizona Legislature passed a law requiring municipalities to convert buses to cleaner-burning fuels. Retrofitting City of Phoenix vehicles into compliance could cost as much as $15.5 million, money which will probably come out of the operations budget. Deep budget cuts usually mean reductions in service, fare increases, or both. Since bus fares have already been raised by 20 percent in response to the 1994 loss of federal operating funds, another fare increase in the near future could be difficult.

It goes without saying that expanding existing public transit systems -- especially bus systems -- is much less costly than building new fixed rail systems. But some Arizona planners and citizens are showing renewed interest in a light-rail transit system, a trolley-like train that runs on tracks but is powered by overhead electrical lines.

In 1995, the City of Phoenix asked a sample of voters their opinion of a rail trolley (similar to current systems in Portland, San Diego, and Denver) that would run between Metrocenter, downtown, and the airport. Nearly two out of three (63 percent) were favorable to the idea.[23] In addition, transportation planners for Super Bowl XXX were planning a commuter rail demonstration project to take tourists and residents to activities at Sun Devil Stadium. The idea was dropped, however, due to a lack of funding.

While there is no shortage of ideas and plans for building additional public transit capacity for the Phoenix metropolitan area, there is an acute shortage of funds. Phoenix is virtually the only city of its size that does not have a funding source dedicated to transit. In the greater Seattle area a county-wide six-tenths of a cent sales tax is dedicated to transit. Portland, Oregon has an employer-based payroll tax, while the Houston metropolitan area has a full one cent sales tax dedicated to transit.

After the ValTrans half cent sales tax increase was rejected by Maricopa County voters in 1989, all RPTA member cities (and Maricopa County) crafted community-specific transit plans. For example, the City of Phoenix transit plan was adopted by the Council in concept in July 1990. It had four components: an expanded transit schedule and fixed-route bus service as its largest component; a ten-mile modern rail trolley line; a demand-transit van service; and an urban village grant fund for non-auto transportation improvements.

In 1992, the Regional Public Transportation Authority took Phoenix' and other communities' transit plans and melded them into a county-wide five-year plan. This Regional Transit Plan (RTP) was prepared in anticipation of asking the voters to approve a sales tax increase to fund it. When funded, the RTP would: more than

double bus service; create a regional Dial-a-Ride system; aggressively market the transit system and other alternatives to car use; and study the feasibility of rail transit. The much hoped-for tax increase for RTP was defeated in 1994 in Proposition 400.

This state of affairs leaves transit advocates with three short-term funding options:

- encourage individual cities to seek transit funding via the ballot box and hope that improved public education and better plans bring victory;
- seek to meet current, and perhaps enhance, service levels with new public/private relationships;
- attempt to claim more Lottery revenue for transit.

These options are discussed in detail in the shaded box on the next pages, along with two mentioned earlier -- ISTEA and vehicle license tax (VLT).

- **Change auto-centric behavior.**

Convincing the auto-driving commuter to use public transit or another alternative is an extremely difficult task. As a result, creating a transit culture in the Valley is a challenge that will last several generations. It would be naive to believe that large segments of the population will suddenly begin saying "enough" to auto travel out of a deep sense of community. The reality is that Phoenix residents, like most Americans, are "consumers" first and foremost, not neighbors or citizens.

Therefore, a communitarian appeal to change personal travel habits is not likely to succeed. Answers to the 10 questions below provide a clear picture of how far we can count on a sense of "community well-being" to change individual consumption of housing and transportation.

What's your CQ?

Ten questions to test your "community quotient"

1. If you have children, do / did they attend public or private schools?
2. When was the last time you took public transportation?
3. Have you given blood recently?
4. Do you do volunteer work in your community?
5. Do you attend a church, synagogue, or mosque?
6. Have you ever served on a jury?
7. How many of your neighbors do you know by name?
8. When was the last time you checked out a book from the local library?
9. When was the last time you went to a free public event or amusement like a museum or the zoo?
10. Do you use primarily private clubs or public parks for your recreation and exercise?

from Jamie Stiehm, *The Nation*

It is clear that any plan to increase transit ridership in the near future must involve appealing to the public as consumers. This means paying strict attention to the competitiveness of transit in terms of speed, cost, and convenience. Rethinking freeway supply and raising the cost of driving, as was suggested earlier, can be one side of a strategy to appeal to the "consumer." The other side is having alternative modes of travel that meet or beat the auto option for many types of trips.

Not an easy goal, though, especially considering the prevailing mentality in the Valley: "I can get to work in 15 minutes by car. I have a bus stop on my corner, but it

doesn't even occur to me to take the bus. The bus would take 45 minutes to get to work, and then I wouldn't have my car to do errands at lunch. Even if the bus was free, it isn't attractive enough when you think about it in those terms."

What, then, is to be done to change the current auto-centered behavior?

Perhaps the best solution lies in being creative. A number of experts maintain that we have not yet invented a transit system that is effective in handling suburb-to-suburb commuting. Transit, particularly light and heavy rail, is designed for taking people from point A to point B, while residents of the suburbs often go from points A, B, and C to points D, E, F and G. Designing more flexible transit may be a key to making transit so easy to use and so appealing that people simply cannot resist.

Imaginative transportation planners foresee transit systems in the near future that will employ vans and buses of variable sizes with flexible schedules and routes. Such vehicles might run on electric power and carry computers linked to central dispatchers who will direct the vehicles to stops where passengers who had reserved their seats by phone or modem were waiting.[24]

Demonstration projects are thought to be another way to change behavior. The logic is, that people will not change their misperceptions about transit until they "sample the merchandise." Hence, cities like San Diego and Portland have constructed their light-rail systems in segments, to both test the market and expose residents to the system. Once residents get hooked, the thinking goes, it's easier to raise revenue for transit and add new miles of tracks. Indeed, it worked in these two cities; San Diego is adding new miles to its original light-rail and Portland is planning to do the same.

San Diego: A Light Rail Success Story

In the face of considerable opposition from city council members arguing for freeways before transit, the San Diego MTDB Trolley light rail system opened between downtown San Diego and San Ysidro on the Mexican border in 1981.

From an average daily ridership of 11,000 in the first year, the 15.9 mile demonstration South Line increased ridership to more than 20,000 a day in less than five years. With the addition of the East Line in the right-of-way of the former San Diego & Arizona Eastern Railroad in 1986, ridership in the system rose above 44,000 daily.

With ridership continuing to rise steadily and farebox returns over 90 percent, planning soon began on a Bayside Line, a North Line, and an extension of the East Line.

Today, the San Diego trolley is seen as one of the most successful light rail systems in North America, and a prototype for other cities. Indeed, Sacramento and Santa Clara, California followed suit in the late 1980s with their own light rail systems modeled on San Diego's.

Columnist Joe Bob Briggs recently scoffed at these rail projects as nothing more than "theme park rides." While some skepticism is appropriate (demonstration projects still cost a lot of money), they are usually better than the alternative "build it and they will come" scenario.[25]

- **Alter development patterns.**

Changing development and settlement patterns is another long-term strategy for making transit economically viable (and for making biking and walking viable). Transit needs a critical mass of people and activities to work, and it is *perceived* that many metropolitan areas -- including Phoenix -- are just too spread out.

Studies show, for example, that at net residential densities below seven housing units per acre (or gross densities under 4,200 to 5,600 persons per square mile) public transit use is minimal. It increases sharply, however, at densities above seven units per acre. Therefore, "moderate residential densities in the range of 7 to 15 dwellings per acre can support moderately convenient transit service" by rapid transit, buses, and taxis.[26]

Based on 1990 U.S. Census data, greater Phoenix' 2,707 persons per square mile places it 21st in terms of population density among large urbanized areas (Los Angeles, Miami, and New York, respectively, are the most dense).[27] With the exception of the Fort Lauderdale, Florida area (3,785 persons per square mile) every region that is more dense than Phoenix has either a rapid or light rail transit system, or is planning to build a rail system.

Perhaps a more telling statistic, however, is that nine of the fifteen regions with *lower* population densities than Phoenix have either light or rapid rail or are planning for rail. Three additional regions have initiated discussions about the development of rail systems. Atlanta, for example (which is known for its efficient rapid rail system) has a density far lower than that of our region -- less than 1,900 persons per square mile. In addition, the vast majority of these areas -- Atlanta included -- have more extensive bus systems than exists in the Valley.

Rail Systems in Large Urbanized Areas Less Dense than Metro Phoenix

urbanized area	persons per square mi.	rail system
Phoenix	**2,707**	
St. Louis	2,673	**U**
Cleveland	2,638	**U**
Tampa	2,630	†
San Antonio	2,578	
Riverside/S. Bernardino	2,543	
Houston	2,465	
Milwaukee	2,395	*
Cincinnati	2,370	*
Dallas/Ft. Worth	2,216	**U**
Pittsburgh	2,158	**U**
Norfolk	1,994	†
Minneapolis	1,956	*
Indianapolis	1,951	†
Atlanta	1,898	**U**
Kansas City	1,674	*

U = in operation
* = in planning, design, or under construction
† = rail proposal discussed

Sources: U.S. Census (1990), Pentrex (1994), and Urban Mobility Corporation (1995)

Most metro regions, including Phoenix, have fairly-high density transit corridors. In fact, corridors are usually chosen for their concentration of people and activities (business and entertainment centers). Similarly, if properly orchestrated, development will follow rail transit lines. In Portland, they're aggressively pushing "transit oriented development" by building the transit line first and then steering high density, mixed use development near by. San Diego is another city with a transit-oriented development policy in place. Public transportation and land use policy experts have arrived at several general conclusions about how to increase transit usage by altering development patterns.

Although each metropolitan case is different, there are some broad principles that should be considered:

! **The location of residential areas matters.** As mentioned earlier, residential densities do affect transit patronage, but the residential density of an area is less significant than its location. Anthony Downs explains, "clustering high-density housing near either downtowns or rapid transit stops is more effective at increasing public transportation usage than raising average residential densities over large areas."[28]

! **The density of nonresidential clusters -- such as large shopping centers or business districts -- is much more important than residential density.** In other words, clustering many nonresidential land uses close together would be more effective at promoting transit usage than raising residential densities but keeping commercial space dispersed.

! **Concentrate many jobs in a few large centers.** There are many obstacles to carrying out this strategy, including fragmented local government structures, and strategies that promote greater jobs-housing balances so people can live near work. But if they can be overcome, there are some potential payoffs for transit ridership. For example, clustering firms together makes it easier to create strong transportation management associations (TMAs) through which employers can jointly encourage workers to share rides. Job concentrations also allow TMAs to provide certain direct services for workers more effectively than if the firms involved were scattered widely. TMAs can provide shuttle buses or vans linking different parts of the job-concentration area for a low fee or even for free. This would make it easier for employees to visit one another, lunch together, or shop during lunch breaks without their cars.[29]

These principles can be used not only to guide new development at the region's fringe, but to revitalize urban centers and inner suburbs. Indeed, the challenge is to develop a regional growth strategy that uses infill and new growth areas to reinforce transit. Infill is basically a process of "re-densification"; it focuses on "filling in" vacant lots in urban cores and older suburbs with housing and businesses. The corollary strategy for low-density fringe areas is to channel development and jobs into a few big, mixed-use centers and cluster high-density housing around transit corridors.

Fortunately, the City of Phoenix is a believer in both of these strategies and has already realized benefits from them. The renaissance of downtown is due in part to a business, cultural, and entertainment infill strategy started over a decade ago. With new cultural and entertainment amenities in place, infill housing is the next step to creating a critical mass of people and activities downtown which is capable of supporting public transit.

In March 1994, the City of Phoenix started an infill housing program. At the same time, Phoenix played a proactive role in steering two major new employers -- Sumitomo and the Mayo Clinic -- into one center at the city's northeast boundary. Concentrating development in this way does not mean stopping growth at the fringe. But, the density levels achieved will not promote sprawl and will support transit in the future.

The City of Phoenix is correctly assembling the tools and information it needs to more clearly designate where development should and should not occur. Other additions to the city's "smarter growth" agenda are the planning department's identification of future high growth corridors and a citizen's task force for the selection of desert lands to be preserved. The City Council has also adopted new impact fees to pay for the cost

of extending services and infrastructure to fringe areas.

Maricopa County and its cities must start making choices -- such as establishing infill incentives and impact fees -- that support compact development and transit use. Better yet, these governments should consider adopting regional tax-base sharing combined perhaps with geographically-differentiated impact fees -- lower on the urban cores but higher on the fringes of the region -- so that developers don't just head for the lower land costs.

The state can also help on at least two fronts. First, the Arizona State Land Department can forge a partnership with the city for the management of growth on state lands within and adjacent to Phoenix. Second, the legislature can extend the property tax abatement currently afforded historic preservation to infill housing.

WHO WOULD BENEFIT FROM TRANSIT IN THE VALLEY?

Even setting aside the admittedly difficult growth management, land use, and pricing issues, a fundamental question still remains at the center of any transit debate in Phoenix: for whom are we creating transit? Who could be counted on to get the transit agenda moving?

Looking only at the current transit ridership statistics, it would be easy to conclude that the vehicle-less, the young, and senior citizens are the major beneficiaries of transit. But if the analysis goes deeper, it is easy to see that a variety of others stand to gain significantly from an enhanced transit network.

Indeed, a transit system should be thought of as more than a mere convenience, an alternative, or part of an environmental solution. A well-conceived and efficient transit system can not only increase urban mobility, but it can also send a signal to a visitor or a business that the region is thinking about its future, and is preparing to grow smarter.

But who in the Valley would benefit from new or expanded transit? A number of people and groups, including:

The Business Community

The primary reason why the business community supports public transit is that it makes simple economic sense. Indeed, one need only look 400 miles to our west to see how the ravages of unchecked sprawl, combined with a lack of public transit can hinder economic growth by interfering with productivity and increasing the cost of doing business. Stated simply, the economic survival of a region depends on efficiently importing and exporting goods and services.[30]

In addition to enabling goods and services to flow easily, a transit system also allows people and workers to move more efficiently. This aspect of transit has particular relevance to the metro Phoenix area, where the geographic mismatch between workers and jobs has drawn more attention in recent years.

One clear example of this mismatch can be seen in the resort industry. Although virtually all of the resorts in the Valley employ housekeepers and other low-paid service employees, few of these workers can afford to live in or around these predominantly high-income resort areas. This situation forces workers into long commutes, which, in turn, raises the payroll costs of employers who have to offer higher compensation to get employees to travel the longer distances. It also effectively reduces the pool from which to select the best

employees. In the end, the cost of an employee's mobility becomes a part of the cost of doing business.

The direct and indirect costs of employee mobility can also spill over into other aspects of a business operation. For example, although the cost of a worker or shipment stuck in traffic is difficult to quantify in terms of lost productivity, the expense of buying an extra parcel of land to build an employee parking lot is easily understood by most companies.

Finally, employer-based trip reduction requirements, as imposed by Arizona law in 1988 and the federal Clean Air Act Amendments of 1990, have forced all companies with 50 or more employees to implement plans that encourage workers to join car pools or find means other than automobiles to get to work. Often, employers are forced to divert employee time or -- in some cases -- create a new position to coordinate carpool, vanpool, biking and other transit efforts.

Employer-mandated trip-reduction requirements have remained controversial since their inception. Recently, a group of manufacturers in the Valley placed trip reduction requirements high on a list of burdensome mandates they would like to see addressed in the future.[31] A transit system would, of course, be one step in addressing the problem.

Residents of Old and New Suburbs

For many newcomers to the Valley, the area's affordable home prices put the American dream within reach. While many new residents choose to live in the outlying subdivisions because of their newness and affordability, it is apparent that an anxiety about urban mobility is beginning to creep in. In some areas, congestion is worsening as newer, farther-out subdivisions and master plans are completed. This anxiety over mobility was perhaps manifested in the 1994 Proposition 400 transit-and-freeway tax vote. Voters in two of the Valley's largest suburban communities, Tempe and Scottsdale, approved the tax, and voters in the Valley's fastest growing suburb, Chandler, failed to pass it by only a very thin margin (49.8% voted YES).

In addition to the traffic and road problems in some of the newer suburbs, residents of the older suburbs are beginning to feel uneasy also. As the Valley has continued to expand rapidly at its edges, residents of older suburbs are beginning to discover that they now live in areas considered to be "central" parts of the city. Recent years have brought ever-worsening pass-through traffic to many of these areas, causing the need for new stop signs, traffic signals, road widening, and other traffic flow modifications where they were formerly unnecessary.

How would transit help these areas? In addition to traffic relief, at least one study indicates that rail transit could have a significant economic impact. Studying metro rail development in the suburban Washington D.C. area, University of Virginia researchers found that the development of transit lines had a positive effect on both the median home price and median family income in older suburbs.[32]

Senior Citizens

Because of age, illness, or having lost a spouse, some older citizens are unable to complete simple errands or see a doctor without mobility assistance. A lack of adequate transit increases the dependence of older persons on family and friends for this basic mobility. In addition, the absence of transit can force seniors to continue to operate vehicles at a time in their lives when many would perhaps prefer to use public transit.

Although senior citizens currently constitute a sizeable portion of the Valley's transit riders, the inadequacy of transit service has perhaps caused this figure to remain artificially below where it might otherwise be. And with the population of senior citizens in Maricopa County expanding at a rate which is roughly double the rate of growth of the general population, transit will almost certainly remain an important issue for the Valley's older citizens.[33]

Low-Income Households

Perhaps more than any other population, low-income households depend on public transit for basic mobility and opportunity.

UCLA Professor Martin Wachs has said that mobility is "as critical a need as housing, health care, and education" for the residents of most American cities.[34] Indeed, while a lack of employment is often the primary cause of a family's dependency on governmental assistance, mobility can play a significant role in that equation.

How do employable low-income people get to a job if they do not have an automobile? How do they look for work or attend a job interview across town? And, even if they are able to secure employment, how can they demonstrate reliability and on-time attendance if dependent upon the Valley's often sporadic and inadequate transit? What's more, for some households, a minor change in transit service or an increase in fares can eliminate the margin that makes a minimum wage job worth having, encouraging people to choose government assistance over earning wages.

Even if a low-income household is able to purchase a car and secure employment, however, it faces additional difficult choices. Often, families are forced to choose between auto insurance and other necessities, such as health insurance. With new or expanded transit in the Valley, the need for an automobile would be reduced, perhaps expanding employment opportunities and reducing the need for government assistance.

Transit Ridership in the Valley
(annual ridership)

year	# of boardings	% change
'90-'91	30,598,271	
'91-'92	31,632,283	+ 3%
'92-'93	32,194,122	+ 2%
'93-'94	33,252,295	+ 3%
'94-'95	34,979,080	+ 5%

Source: *Short Range Transit Program*, RPTA

People Who Are (or Who Would Like to Be) Transit Dependent

In addition to those who cannot afford to own a car or pay auto insurance, many persons with handicaps are involuntarily dependent upon transit for their daily mobility. For these so-called "zero-vehicle" households, public transit is the only means of transportation, no matter what the cost, frequency of service, or condition.

In terms of indirect cost, this transit-dependent population bears a significant burden that others do not: on average, trips take three times longer than for a household that has an automobile.[35] As with low income households, transit is an important key to access and opportunity for people who are unable to operate a private automobile, and any transit extension or new service would undoubtedly be beneficial.

It should also be noted that there is a potential pool of citizens in the Valley who own automobiles but would <u>like</u> to use transit nonetheless. In a survey of residents of the City of Phoenix conducted in the early

1990s, 73 percent of respondents indicated that they would use transit more often if a rapid transit system was available instead of only buses.[36]

Convention and Tourism Industries

While most transit systems are designed for workforce and citizen mobility, the San Francisco Cable Cars and the Metro Rail in Washington D.C. -- among others -- have proven to be functional ways to connect tourists with convention centers, educational institutions, cultural facilities, and shopping centers. Similarly, an efficient transit system in the Phoenix area would be beneficial to visitors and the tourism industry by improving access to many of the Valley's attractions and bolstering the region's image.

One recent survey of corporate meeting attendees indicated that they believe a transit system is an important amenity for any city, and the presence of a system can influence their decision to attend a meeting. According to the study, a region's transit system is also frequently a primary consideration in the selection of a convention site because it reduces the need for chartered shuttle bus service between hotels and the convention center.[37] Transit also makes it easier for convention delegates and other visitors to shop and patronize restaurants and local entertainment, providing more per-visitor tax revenue.

Considering the Valley's climate, there should be little doubt that an efficient weather-protected transit connection between downtown Phoenix, Sky Harbor Airport, the stadiums, and the major shopping areas would provide a significant boost to tourism.

The Environment

Polling data has continually shown that Arizonans care about the air they breathe, the water they drink and the condition of the desert that surrounds them. A significant influence upon the Valley's air quality is, of course, emissions from automobiles. Both long commutes and traffic congestion increase the emissions discharged into the Valley's atmosphere.

During the first nine months of 1995, ozone (or smog) levels in Maricopa County exceeded federal health standards 27 times. But high ozone levels have greater implications than just the ugliness of the "brown cloud" hanging over the Valley; smog is also a health hazard capable of causing serious respiratory problems.

Before the Valley advances a transit plan in the interest of reducing smog on a massive level, however, it should be noted that recent research indicates that transit appears to be an extremely expensive way to reduce levels of unhealthful air. Although the Valley's now-famous brown cloud would probably be made less prominent with new or increased transit, fuel and auto technologies may hold even greater potential for significantly reducing auto emissions in the future. Clean air technology, however, will not address the issue of congestion.

Arizonan's Willingness to Pay for Environmental Regulation

"Increased protection of the environment could lead to higher costs for goods and services. Would you be willing to pay these higher costs to protect the environment?"

YES	67%
NO	14%
Depends	17%
Don't Know	2%

Figures based on 800 person probability sample of adult residents of Arizona (+/- 3.5% at a 95 % confidence interval). Survey conducted between April 5 and April 14, 1995 by Social Research Laboratory, Northern Arizona University for the Arizona Comparative Environmental Risk Project (ACERP).

Automobile Drivers

For the Phoenix automobile driver, a transit system has the potential to do three important things: 1) reduce traffic congestion; 2) reduce automobile and commuting costs, and 3) reduce average commute time.

The congestion argument is fairly easy to see. Take away Chicago's transit system and an estimated 700,000 more automobiles would clog their already crowded surface street and freeway system. Although much less dramatic in the Phoenix area, the limited amount of public transit does have an impact on congestion. A more extensive system resulting in more ridership would likely have a more beneficial effect on congestion.

As indicated earlier, however, most Valley residents (like most Americans), prefer to travel to work in their private car, usually alone, primarily because of convenience, comfort, privacy, and speed of travel. For the average automobile commuter, the costs of driving can be significant, although sometimes hidden and frequently paid incrementally. Consider the following comparison:

The Cost of Driving vs. Taking Transit*

Annual Expenditure	private vehicle	public transit
operating costs (inc. fuel and service)	$1,250	$0
insurance	$788	$0
fixed costs (incl. depreciation, registration, license, and other taxes)	$2,850	$0
transit cost (Express bus pass at $51 per month)	$0	$612
TOTAL	**$4,888**	**$612**

* based on a the cost of private vehicle driven a total of 13,125 miles per year in a vehicle that gets 25 miles per gallon at a fuel cost of 0.95 cents per gallon. Average annual cost per mile of 0.372 for automobile, 0.413 for public transit. Based on data from quarterly surveys by Runzheimer International for the American Automobile Association.

Source: Hodgins, 1994 (with updated transit cost)

As the comparison indicates, the commuter who drives roughly 11 miles per day to and from work and takes short weekend trips incurs costs of roughly $4,900 per year per vehicle (including fuel, service, insurance, depreciation, registration and other taxes).[38]

In addition to gas and maintenance savings from switching to transit, drivers would also

benefit in other ways. Anyone who pays auto insurance is, of course, used to the question: "how many miles do you drive your car per year?" With transit ridership just one or two days a week, lower annual automobile mileage can turn into insurance savings on the order of 10 to 30 percent.[39]

The Region and the State

After many years of uncontrolled, sprawling development, the process of bringing rail transit to the Los Angeles basin has proven very costly. By insisting on completing the freeway system before starting on the transit system, the Phoenix area is setting itself up for the same traffic-congested, smog-choked experiences of Southern California -- a region that tried to "build" its way out of traffic congestion by building more freeways.

Based on the experiences of other regions, a transit system in the Valley would foster higher density in and around transit access points, primarily in the existing economic and residential centers. By focusing density, transit would encourage development where services and public infrastructure are already in place, instead of on the periphery where the extension of such infrastructure and services would be necessary.

Taxpayers

In any discussion about the development or extension of mass transit, the issue almost always comes back to the "bottom line": how much will the taxpayers be asked to pay? While absolutely a valid question, it should be answered in the correct context; namely, what do taxpayers pay now for mobility?

In 1995, the residents of Maricopa County spent roughly $6 billion for the purchase of vehicles, road and freeways.[40] In addition, residents paid incalculable costs in terms of lost productivity and lower quality of life due to congestion and air pollution. Thus, any discussion of the cost of a future transit system should start at the baseline: roughly $6 billion annually. Currently, we spend only about 1/100th of that amount -- roughly $60 million annually -- on public transit.

WHERE DO WE GO FROM HERE?

The truth is, Arizona needs greater wisdom in its approach to transit. The whole state should be pressing forward on many fronts, searching for answers we haven't yet found, and following the ones that we know work.

Certainly we should start with what we know.

O Spreading out means more driving and less transit.

The Phoenix metropolitan area continues to grow in a low-density, dispersed way. Growth on the periphery places destinations so far apart that the automobile is the only practical way to get from place to place. Moreover, a spread-out pattern of growth cannot be served cost-effectively by transit or roads. Therefore, residents in outlying areas are limited to using their cars on increasingly congested roads and freeways.

On the other hand, compact growth can reduce total trips and increase transit use. A study of San Francisco residents showed that people who lived in traditional, compact neighborhoods made 42 percent fewer trips by car than their suburban counterparts did. In addition, the study found that a doubling of density resulted in a 30 percent drop in the number of vehicle miles traveled.[41] Compact growth facilitates the use of alternative modes; people have a choice of walking, biking, driving, or taking transit.

O It takes a mix of many interrelated and complementary actions to be successful.

No strategy applied alone could greatly reduce auto travel and increase transit ridership. Meeting these goals will require changes in land use patterns, planning and personal habits. It will require better city and state investment policy and more state-to-city and city-to-city cooperation.

Before making the investment required to have an efficient transit system, it is important to have all of the players on board: land use and transportation planners, traffic engineers, automobile owners, citizens, developers, the business community, state policy makers, and Valley cities. All will play a role in making transit economically, socially, and physically feasible.

O It is more than people without cars -- the young, the poor, the elderly, the handicapped -- who benefit from transit.

A transit system that links the region's pre-eminent points of interest with residential and employment centers would not only benefit key industries and tourism, but enhance the mobility of both visitors to the region and workers throughout the metropolitan area. Thus, a well-conceived and efficient transit system can also send a signal to a visitor or a business that the region is thinking about its future, and is preparing to grow smarter.

O Transit systems do not pay for themselves.

The fact is, farebox revenues account for roughly 30 percent of the Phoenix metro transit budget. Other cities have similar farebox recovery ratios. Thus, without significant state and federal assistance, none of these systems would be in business. Defenders of the subsidies say we are benefitting so much that the subsidies 'pay for themselves.' They argue that because of transit, roads are less congested, air is less polluted, and we delay the day when federal and state money will have to be used to build more freeways.

According to columnist George Will, "there is some truth in all these arguments and a lot in this one: government more heavily subsidizes air and road passengers. United Airlines is not expected to build airports and Greyhound is not responsible for maintaining the highways."[42] Although Mr. Will is speaking about Amtrak, his point is equally apropos for transit, if not more so.

O There is no shortage of excellent transit options.

Both in terms of technology (buses, light-rail, trains) and user incentives (raising the cost of driving, encouraging more use of transit) there are a variety of directions which the Valley can take in the future. Perhaps the only shortage is in political will to do what is required. That's the conventional wisdom of the moment, at least according to Anthony Downs of the Brookings Institution. Downs concludes that the best medicine for making transit feasible -- restraints on automobile use and increased urban densities -- are also the most difficult for citizens and politicians to swallow.

O Finally, we know that a new or expanded transit system is not going to happen by accident, but by intention.

Sprawling, congestion-clogged cities like Los Angeles and Seattle are the way they are today not because their people wanted it that way, but because they missed the chance to make their choice. Livable, fast-growing cities like Portland and Vancouver,

B.C. are the way they are today because their citizens' chose to make long-standing decisions and commitments to support compact development and transit use.

What the Phoenix metropolitan region needs now is leadership, courage and vision to deal with this decade's transit strategy.

Back to the Drawing Board

Much remains to be done conceptually and physically to make transit both viable and sensible in the Valley:

O Decide what the basic characteristics of the transit system should be.

The Valley seems both ambivalent and fractured about what type of transit system it would like to have in the future. On the one hand, there are those who believe that some type of rail system is both desirable and necessary for regional economic sustainability and livability. Other transit advocates, with memories of the ValTrans vote only seven years old, believe that a bus-based system is perhaps a better way to approach voters. Still others think a flexible, hybrid system containing a combination of public and privately-funded buses and transit vehicles, and a pilot commuter rail line is the way to go. The shaded boxes on the following pages describe the characteristics, advantages and disadvantages of the predominant types of transit systems.

The business community can perform a valuable public service by taking a lead role in stimulating a constructive region-wide dialogue on transportation issues in a fast-growth urban area. The debate should be one in which public transit options and opportunities are thoroughly addressed.

O Develop a vision for growth and community livability before asking voters again to support large-scale transit investments.

The cities of Portland and Vancouver, B.C. present transit as part of a strategy to grow smarter and preserve livability. Arizona leaders present transit as a second cousin to freeways. In Portland and Vancouver, a vote for transit is a vote to preserve the region's quality of life. In Arizona, a vote for transit is also a vote for more freeways, which citizens know work both for and against livability.

While it is certainly easier for citizens to focus on things like the addition of bus and freeway routes, focusing only on these visible "improvements" is a double-edged sword. Such a narrowly pragmatic vision can be potentially paralyzing because the debate eventually boils down to which cities and which neighborhoods get what, and when. In turn, this type of focus allows citizens and politicians to decide on transit without considering any real effect on the more systematic troubles and long term livability of the region.

One way to stay above this fray in the future is to make sure the transit discussion is more about how the region can grow and actually improve its livability. It is obvious that the Valley does not possess a "transit culture" like the greater Portland area. For instance, few Phoenix area government and business leaders speak more passionately about transit than they do about new freeways, as many of Portland's leaders do.

Nonetheless, there is strong recent evidence that suggests that Valley residents, businesses, and politicians are growing increasingly concerned about the quality of life and the growth pattern of the region. Indeed, opinion polls and newspaper op-eds conveying strong environmental values, the voters' defeat in 1994 of the private property rights initiative and

deflecting the raid on the Heritage Fund, the rumblings about an urban growth initiative on the 1996 ballot, and the recent steps by Phoenix and Scottsdale to preserve desert environments may be indicators of a sea-change in the works.

O Establish a conceptual and procedural framework that will lay out the desired steps -- including funding -- to reform a lop-sided transportation system.

As discussed in this report, much of the Phoenix area's transit future turns on the decisions and actions of government agencies, businesses, community organizations and citizens. Clearly, changing old habits won't be easy -- nor entirely desirable -- for some of these groups. However, if transit is to be successful in the future, we know that options and policies have to be developed interactively, not in isolation.

It is also clear that transit has to be paid for, and the choices are straightforward:

- rearrange current spending priorities, or
- raise new money.

The devil, however, is in the details. Specifically, which funds do policymakers shift: ISTEA, lottery, or general fund money? And to generate new money, do policy makers raise the gas tax, remove the state sales tax exemption on retail sales of motor fuel, or try again for a general sales tax increase dedicated to transit?

An enlightened public debate on these and other financing options is long overdue. To date, the "public" has really only been presented with one transit funding option -- a sales tax increase. Moreover, the trend recently is for policy makers to single-handedly provide solutions, neglecting to take the time necessary to build support for or think through the alternatives. For example, public finance experts argue that motorists should pay for transportation, including transit, but Arizona policy makers have preferred dedicated sales or property taxes which do not meet the "motorist pays" principle. On the other hand, gas taxes, driver license fees, vehicle emission fees, and parking fees do.

O Build a broad-based constituency to promote public transit, starting with all the groups and interests identified in this report.

Because a great deal of planning and money is required for a successful transportation ballot campaign in Maricopa County, there is often a few large sponsors that end up calling most of the shots. Almost inevitably it seems, other important groups get locked out of the action.

Even the broadest coalitions are too selective; they tend to be made up of well-educated, upper-income professionals who, as a group, consistently vote for public transit investments. The enthusiasm does not spread to the rest of the community, and especially not to the most vigorous supporters of transit, the riders. What's been missing is full mobilization of all transit users and those who benefit by transit, and the use of the full range of community-based human talent, energy and intelligence.

ACTION STEPS FOR THE VALLEYWIDE TRANSIT TASK FORCE

O Share information about the future of transit

Stronger support for transit in the Valley will not occur without greater publicity about its poor current condition, the mobilization of broader coalitions and constituencies that want transit improved, and a thorough discussion of the benefits of public transit. Publicity will help spread the word about transit, highlight its importance, build momentum, and let policymakers know about the increasing organizing activities. Communication activities might include:

! The preparation of a 20-30 minute "civic club" presentation that provides an overview of this report. The presentation should include the key trends and transit issues in the Phoenix metropolitan area and stress all of the players who must be on board to make transit economically, socially, and physically feasible. A video may also be developed as a part of the presentation. The presentation should be made widely available to the general public, and especially to Valley leaders.

! The seeking of opportunities to present the strategy at governmental conferences and private sector association meetings.

! The wide distribution of this report to local newspaper, television, and radio media, as well as to local and regional elected officials and their staffs.

! The development of strategies to encourage municipalities within the Valley to use this report to rethink what actions they can take to:

a) deal with the forces promoting the car culture;

b) achieve transit-supporting land use; and

c) improve coordination of decision-making and encourage cooperative regional solutions.

O Promote ongoing dialogue about the future of transit and growth in the Phoenix metropolitan area.

What is needed is a series of regional sessions that place the transit issue into a broader context and foster a progressive thinking about regional growth concerns. This public dialogue could occur through one or more of the following efforts spearheaded by the Valleywide Transit Task Force:

Option A - The formation of a Valley "Livability Council" in collaboration with the City of Phoenix Mayor's Office, Greater Phoenix Economic Council, Greater Phoenix Leadership Council and related local and regional commissions and representatives of local and regional governments. The Council could serve to address and educate Valley leaders and residents about the broad issues and interrelationships among land use, transportation, community development and livability, and environmental quality.

The BIG question for this group might be: "can we preserve what we like about the Valley while preventing additional sprawl and traffic congestion?" Since a major part of the answer lies in ensuring that growth happens in the right way in the right places, group discussion could be structured around comparing existing development patterns with three major alternatives (see table on p. 26). This means transit is addressed as part of a broader debate over the pros and cons of alternative growth patterns. However, the debate should not place transit in an "if-then" relationship to growth management.

Option B - The formation of a committee consisting of developers, architects, businesses, government agencies, and elected officials to identify what each can do to show taxpayers they have taken steps to

"do no more harm" to the region's transit future and to promote a pattern of development that will help stabilize vehicle miles traveled over the next decade. Such a "demonstration" of collective responsibility for making transit viable could be a powerful factor in earning public support for future transit funding strategies.

This committee -- far more narrow in focus than a Livability Council -- would be charged with outlining a set of ideas for planning and building communities with people in mind, not just cars, and for reducing automobile dependence.

To accomplish its task, the committee could recommend ways to ensure that developers and community planning in the Valley can adhere to certain fundamental principles to make communities more livable, more walkable and more easily served by transit.

The California Local Government Commission developed such a set of principles in 1991. Since then, a number of cities -- San Jose, Pasadena, San Diego and others -- have updated their general plans to incorporate these so-called Ahwahnee Principles (see shaded box following p. 26). Because several of the Valley's cities are currently updating their general plans (and the City of Phoenix may do so in the near future as well) the timing of this effort could be fortuitous.

Option C - The assembly of a diverse group, starting with representatives from all of the interested parties identified in this report, to advocate changes in the transportation financing system to support a more balanced share of federal, state, regional and local funds for transit.

In the short term, this group can seek additional lottery funds for transit, support local sales tax increases for transit, push for a shift in the amount of ISTEA monies going to transit, or advance the concept of instituting a sales tax on gas. In the long term, the group will want to be a key player in organizing and shoring-up support for future city or county ballot initiatives to raise funds for public transit (e.g., the City of Tempe's planned effort in 1996). The group would also be positioned to spearhead public and private partnerships for specific transit projects such as a light rail demonstration project from Metrocenter, through downtown Phoenix, to the airport and Tempe, or a downtown Phoenix Dash-type circulator in other areas of the Valley, such as the Camelback Corridor.

Alternative Development Patterns

	Growth Management	Residential Pattern	Transportation	New Job Location
Dominant Vision: Unlimited Low-Density Growth	markets allocate housing and jobs in accord with local zoning and building codes	owner-occupied, single-family detached homes	private automobiles	low-rise workplaces
Alternative #1: Limited-Spread, Mixed-Density Growth	semi-permeable urban growth boundary	clusters of high-density housing amid larger areas of low-density housing	transit use encouraged	voluntary concentration of jobs in designated nodes
Alternative #2: New Communities and Greenbelts	growth boundaries for designated corridors, new towns, and metro area	similar to #1, but with housing outside of urban boundary clustered in relatively high-density new communities	emphasis on mass transit	regulation and incentives help to concentrate jobs in new centers
Alternative #3: Bounded High-Density Growth	strongly enforced growth boundary and job location planning, with both housing and transit subsidies	almost all growth occurs as densification of urban core	heavy reliance on mass transit	regulations force new jobs into the urban core

Source: Anthony Downs, *Landlines*, March 1995, Lincoln Institute of Land Policy.

The Ahwahnee Principles: Toward More Livable Communities

Preamble:

Existing patterns of urban and suburban development seriously impair our quality of life. The symptoms are: more congestion and air pollution resulting from our increased dependence on automobiles, the loss of precious open space, the need for costly improvements to roads and public services, the inequitable distribution of economic resources, and the loss of a sense of community. By drawing upon the best from the past and the present, we can plan communities that will more successfully serve the needs of those who live and work within them. Such planning should adhere to certain fundamental principles.

Community Principles:

1. All planning should be in the form of complete and integrated communities containing housing, shops, work places, schools, parks and civic facilities essential to the daily life of the residents.
2. Community size should be designed so that housing, jobs, daily needs and other activities are within easy walking distance of each other.
3. As many activities as possible should be located within easy walking distance of transit stops.
4. A community should contain a diversity of housing types to enable citizens from a wide range of economic levels and age groups to live within its boundaries.
5. Businesses within the community should provide a range of job types for the community's residents.
6. The location and character of the community should be consistent with a larger transit network.
7. The community should have a center focus that combines commercial, civic, cultural, and recreational uses.
8. The community should contain an ample supply of specialized open space in the form of squares, greens and parks whose frequent use is encouraged through placement and design.
9. Public spaces should be designed to encourage the attention and presence of people at all hours of the day and night.
10. Each community or cluster of communities should have a well-defined edge, such as agricultural greenbelts or wildlife corridors, permanently protected from development.
11. Streets, pedestrian paths and bike paths should contribute to a system of fully-connected and interesting routes to all destinations. Their design should encourage pedestrian and bicycle use by being small and spatially defined by buildings, trees and lighting; and by discouraging high-speed traffic.
12. Wherever possible, the natural terrain, drainage, and vegetation of the community should be preserved with superior examples contained within parks or greenbelts.
13. The community design should help conserve resources and minimize waste.
14. Communities should provide for the efficient use of water through the use of natural drainage, drought tolerant landscaping and recycling.
15. The street orientation, the placement of buildings and the use of shading should contribute to the energy efficiency of the community.

Regional Principles:

1. The regional land use planning structure should be integrated within a larger transportation network built around transit rather than freeways.
2. Regions should be bounded by and provide a continuous system of greenbelt/wildlife corridors to be determined by natural conditions.
3. Regional institutions and services (government, stadiums, museums, etc.) should be in the urban core.
4. Materials and methods of construction should be specific to the region, exhibiting continuity of history and culture and compatibility with the climate to encourage the development of local character and community identity.

NO TRANSIT

Characteristics

! Regions which lack or have inadequate transit systems are dominated by automobile usage.

! Extensive grid and freeway systems usually proliferate the regional landscape.

! Travel modes in transit-inadequate environments are often low-capacity (i.e., bicycles, walking, personal cars, taxis).

Advantages

! For those who can afford to purchase and operate private automobiles, increased mobility and freedom of choice are the primary advantages. In addition to having flexibility and comfort in commuting, auto owners can live in suburban communities to live in, and can access far-flung leisure, recreation and shopping.

Disadvantages

! Severe traffic congestion, air pollution, commuter frustration, and productivity and "quality of life" damage are potential biproducts of inadequate transit.

! Automobile owners spend large amounts of time and money operating, maintaining, and repairing their vehicles.

! Potential losses of millions of dollars in federal highway funds if clean air requirements are not met in region.

! Large public expenditures are required for engineering, freeway construction, roadway control, and monitoring the flow of traffic.

! Inadequate public transit affects job and educational opportunities for those unable to own or operate private automobiles: low-income households, the handicapped, senior citizens, children/teens.

JITNEY / PARATRANSIT SYSTEMS

Characteristics

! Characterized by small passenger vehicles (vans or minibuses), frequently carrying 4 to 20 passengers and operating informally on a fare-paying basis.

! Services may include personalized door-to-door service, shared service with routes determined by individual passengers, and regular service routes similar to buses.

! Jitneys can be operated by private owners who choose their own vehicles, routes, and hours of operation.

! The primary form of transit in many developing countries; the airport "Super Shuttle" in the U.S. is an example of jitney or paratransit service.

Advantages

! Can often serve as a valuable supplement -- and in some cases an alternative -- to regular bus transit service.

! Because of informality, operators can be responsive to public need, and can change routes quickly and easily to suit demand.

! Service is often frequent and can be viable even at low levels of demand.

! Vehicles can be operated free of taxpayer expense by private owners or small enterprises at a profit.

Disadvantages

! Because of small passenger capacities, paratransit vehicles are unlikely to provide a complete alternative to mass transit in corridors with heavy demand.

! Safety levels are the same as private vehicles, but lower than that of rail transit.

! Large numbers of paratransit vehicles can cause traffic congestion, however, the net effect may be reduced congestion.

BUS-BASED TRANSIT SYSTEMS

Characteristics

! Systems usually consist of fleets of motorbuses operating on public streets.

! Routes, frequencies, fares, stops and capacities can vary widely, depending upon vehicle sizes, and a variety of other factors.

! Travel speeds can be enhanced by reserved bus lanes and by express service with limited stops.

Advantages

! Flexibility; bus-based transit can accommodate changes in the shape of the city, as well as changes in demand. Routes can be modified literally overnight at no cost; expansion of service is only limited by availability of vehicles or cost of purchasing new vehicles.

! Capital costs are low comparatively and are entirely vehicle- and maintenance-based, unless exclusive rights-of-way are constructed.

! Bus transit can be provided by the private sector, lessening the impact on municipal budgets and taxpayers.

Disadvantages

! Vehicles operate primarily on surface streets in traffic.

! Passengers and potential passengers often perceive the quality of bus service in terms of reliability, commute time, and comfort of ride -- all of which can be inconsistent.

! Even with careful management of reliability, commute time, and comfort, there are some citizens who simply will not ride a bus.

! Careful maintenance of vehicles is essential. Neglect can significantly reduce the operational life of buses, and can increase air and noise pollution.

LIGHT RAIL TRANSIT SYSTEMS (LRT)

Characteristics

! Shapes and sizes of systems vary, ranging from trolley-like streetcars which share the road with automobiles, to large passenger trains operating on rights-of-way.

! In general, light rail vehicles are electrically-powered, passengers board either from the road surface or from a low platform, and vehicles operate at slow or moderate speeds.

! Stations can vary from simple ground-level platforms like a bus stop, to large stations, complete with shops and cafes.

Advantages

! Flexibility in route location and configuration; vehicles can operate both in traffic, or on separate rights-of-way like high-speed rapid transit.

! Construction costs are usually far below those for rapid rail transit.

! Operation costs are low; LRT can often carry more passengers than buses (three linked LRT vehicles might carry 420 passengers with only one driver) and typically has superior fare box return rates.

! Electric-powered light rail is non-polluting.

! LRT has been called the most useful transit mode for the capacity needs of a low-density suburban land pattern.

Disadvantages

! In several California cities, opposition to LRT has come from citizens concerned about losses of parking and increased noise.

! Light rail is often more capital intensive than bus systems, however it is generally less expensive than heavy or rapid rail.

! Perhaps the greatest question about LRT in the Valley, however, is uncertainty: would Phoenicians ride it?

HEAVY / RAPID RAIL TRANSIT SYSTEMS

Characteristics

! Frequently called subways, or metros, rapid rail systems operate at high speeds almost exclusively on separated rights-of-way in underground tunnels or on elevated track beds.

! Trains usually consist of four to ten cars, with a carrying capacity of up to 1,000 or more passengers.

! Because of passenger volumes, large stations and platforms are needed for quick loading and unloading of trains.

Advantages

! Large passenger capacities and speed of travel are major advantages of rapid rail.

! When built underground, rapid rail can provide a high level of reliability and can assure a comfortable, weather-protected ride.

! Because of exclusive rights-of-way, trains are not affected by traffic congestion.

Disadvantages

! Capital costs; much of the construction takes place under streets, involving costly excavation and disruptions in traffic flows. In addition, construction is likely to take a minimum of five years, and may take much longer.

! Rapid rail systems lack flexibility; once the rights-of-way have been constructed, route modifications are very expensive.

! Farebox revenues of rapid rail systems are frequently good, however, they rarely recover operation costs.

! As with light rail, the major question with rapid rail is ridership: would it (or could it be designed in such a way to) lure large numbers of Valley commuters out of their cars?

COMMUTER RAIL SYSTEMS

Characteristics

! Commuter or suburban rail systems operate on tracks and exclusive rights-of-way shared with freight trains and other intercity passenger trains like Amtrak.

! Commuter cars are often heavy vehicles, either similar to those used on intercity passenger trains, or those used on rapid rail systems.

! Because of shared track, capacity and performance can vary. However, capacities of 10,000 to 20,000 passengers per hour in one direction are not uncommon.

Advantages

! Capital costs are frequently advantageous because simple upgrading of existing rail infrastructure (including track control systems) and new passenger cars are all that are required to initiate operations.

! Like intercity passenger trains and rapid rail systems, commuter rail can provide fast, high capacity, reliable and convenient service.

! Although very few systems are able to recover total costs, some commuter rail systems recover operating costs, including depreciation, from farebox revenues.

Disadvantages

! To cope with high passenger volumes and shared track, commuter rail requires sophisticated signaling and control systems.

! Because commuter rail systems are generally limited to a small number of fixed routes, they have to be supplemented by more flexible systems and feeders, such as buses.

! Addition or modification of routes is likely to be extremely capital intensive.

Short-Term Funding Opportunities for Transit in the Valley

City Sales Tax

Because many of the Valley's cities are already operating on lean budgets and are bracing for additional federal cuts, some are starting to talk about a raise in city sales tax for public transit. The Tempe City Council voted in October 1995 to place a transit-dedicated sales tax increase on the ballot in 1996. Although not an optimal approach, a one-, two-, or three-city transit area may be a practical one.

Knowing that metropolitan-area problems such as traffic congestion and air pollution are best addressed on a regional basis, Valley cities have sought a regional transit solution for more than ten years. However, after two tries at getting county voters to approve funding for mass transit, a city-by-city approach may be the only alternative. Proponents suggest this is a way that transit can "prove itself" and then, having done so, generate support in

neighboring jurisdictions. In addition, some local needs may exceed service improvements available through regional funding; local sales taxes could fund locally-oriented service, such as internal circulator systems.

The greater Phoenix area is not alone in this regrouping challenge. After Seattle area voters rejected a regional transit plan and funding this year, that region is now looking into changing it's transit domain to target those areas most supportive of transit for another vote in the near future.

Portland had a similar situation. In November, 1994, voters approved $475 million for a new light-rail line which would stretch from Portland to Clark County in Washington State. But residents in Clark County rejected local funding for their end of the project in February. Portland has been left with a dilemma: keep the regional plan in place and wait for another vote in Clark County, or go it alone, which will require going back to Portland's voters for just one part of a the proposed light-rail system.

Shared Public/Private Responsibility

Can the Valley look to public-private partnerships -- or the private sector alone -- to pick up some of the transit services that may be cut as a result of a shrinking budgets?

In cities like New York and Miami, some portions of public transit are produced at no expense to the taxpayer by allowing the private sector to legally operate jitney services. In many cases, these private operations consist of fleets of vans and other vehicles that cruise the streets and provide door-to-door or mainline service. Sometimes, however, these types of patchwork solutions to transit are only grudgingly tolerated by local transit authorities who are intent on projecting a more uniform, system-like image of their regional transit operation. Many proponents argue, however, that these alternative systems are a success by most service criteria. Furthermore, while these informal services may only have a support role, when they are integrated with the other large capacity transportation systems they can make a significant contribution to mobility and absorb peak-period pressures.

Phoenix is already experimenting with public-private partnerships as an option for providing supplementary transit service. The downtown Phoenix Dash -- a circulator funded jointly by an assessment on businesses in the area and the City of Phoenix -- is one example. The question is, would this service option be desirable and feasible in other major job centers in the metropolitan area, such as the Camelback corridor and the future combined Sumitomo and Mayo Clinic sites? Also, does this type of partnership work without corresponding changes in parking fees and policies?

Lottery Revenue

Amending the distribution formula for Powerball Lottery revenues may be the more immediate option for replenishing funding cuts, and depending on the new formula, the

best bet for enhancing service in the future. State law already designates Powerball funds for RPTA and regional transit projects but they have yet to flow because the state general fund has priority over the first $45 million generated annually.

To date, net profits from the Arizona Lottery, including the Powerball game, have not exceeded $45 million, and thus have not been able to pay both state and RPTA funding demands. As the *Arizona Republic* says, the Powerball has turned out to be a "cruel joke" on transit, and the state should correct the situation. Also, current lottery funds allocated for transit and transportation through local governments are not indexed to inflation and thus have diminished buying power.

Reprioritizing Existing State and Federal Money

One way to get a more comprehensive transit system up and running is to use eligible state and federal highway monies, and the 1991 ISTEA legislation makes diversion to mass transit easier than ever, especially for capital purposes. In 1993-94, Arizona's share of ISTEA money was roughly $253 million. Nothing -- except political will -- precludes the state, the cities and MAG from funneling a more equitable share of the money to transit.

The Vehicle License Tax (VLT) is another place to seek additional transit funds. As discussed elsewhere in this report, the Arizona Constitution does not require VLT revenues to be spent on highways and streets. Furthermore, the allocation of these revenues is set by legislation, not the Constitution, and therefore can be changed to include a percentage for transit.

1. Transit Director (City of Phoenix), memorandum, date?

2. 1000 Friends of Oregon, “Making the Land Use, Transportation, Air Quality Connection,” Fact Sheet #1, date?

3. Jonathan Walters, “The Highway Revolution That Wasn’t,” *Governing*, May 1995.

4. U.S. Census data, printed in *Maricopa County Profile*, 1994

5. ibid.

6. Peter Calthorpe, “The Post-Suburban Metropolis,” *Whole Earth Review*, Winter 1991, p. 48.

7. Frank Moretti, “Improved Air Quality and Mobility: Can We Have Both?” The Road Program, January 1995.

8.Garreau

9. U.S. Congress (Office of Technology Assessment), *The Technological Reshaping of Metropolitan America*, September 1995, pp. 193-218.

10. Atlantic Monthly

11. Beyond Sprawl

12. Alternative Visions (Downs)

13. Stuck in Traffic (Downs)